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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/734,647

**Applicant(s)**

HILLIS ET AL.

**Examiner**

Arpan P. Savla

**Art Unit**

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### Response to Amendment

This Office action is in response to Applicant's communication filed December 14, 2009 in response to the Office action dated March 5, 2009. Claims 1, 6, 7, 12, 15, 26, 31, 32, 37, and 40 have been amended. Claims 1-50 are pending in this application.

## REJECTIONS NOT BASED ON PRIOR ART

### Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 26-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. As per claims 26-50, the claims are not limited to tangible embodiments. Based on pages 4 and 19-21 of Applicant's specification, the "system" can be embodied as entirely software, per se, thus lacking hardware necessary to realize the software's functionality. Therefore, the system of claims 26-50 simply represents functional descriptive material and is thus non-statutory subject matter.

4. In view of Applicant's amendment, the 101 rejection of claims 1-25 is withdrawn.

## REJECTIONS BASED ON PRIOR ART

### Claim Rejections - 35 USC § 103

Art Unit: 2185

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-6, 12-20-31, and 37-50** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger (U.S. Patent 6,345,028) in view of “IEEE 100: The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition” (hereinafter “IEEE”) and Yao et al. (U.S. Patent 5,938,734) (hereinafter “Yao”).

7. **As per claim 1**, Jaeger discloses a method comprising:

obtaining one or more temporal addresses corresponding to the at least one specific content (col. 5, lines 49-63; Fig. 1); *It should be noted that the “time stamps” are equivalent to the “temporal addresses.”*

and selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system (col. 6, lines 49-63; Fig. 2). *It should be noted that the re-ordered audio/video/data tracks/signals being streamed from the RAM buffer are equivalent to the “spatial-to-temporal translated data.”*

Jaeger does not explicitly disclose receiving a request for at least one specific content.

IEEE discloses disk read I/O transactions are composed of transaction initiations (i.e. requests) (pg. 590, “I/O transaction” and pg. 1198, “transaction initiation (request”).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the record/playback apparatus receive a playback request so that the incremental temporal segments of each recorded track are read from the disk in response to the playback request. The motivation for doing so would have been to prevent playback at times when the disk drive and/or RAM buffer are not ready to handle the reading and/or writing of data frames.

The combination of Jaeger/IEEE does not disclose associating the specific content with one or more times of one or more transmitted data portions.

Yao discloses associating the specific content with one or more times of one or more transmitted data portions (col. 7, lines 33-65; Fig. 5, element S26; Fig. 6). *It should be noted that the "transfer start timings" are equivalent to the "one or more times".*

The combination of Jaeger/IEEE and Yao are analogous art because they are from the same field of endeavor, that being data streaming systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Yao's schedule within Jaeger/IEEE's recording/playback system. The motivation for doing so would have been to provide a real time stream server and a method for operating a real time stream server, capable of realizing a supply of a plurality of real time stream data with different data rates by a scheduling scheme using constant time-slot interval and transfer start timing period, without wasting a transfer capacity of disk devices (Yao, col. 2, lines 40-46).

8. **As per claim 2**, the combination of Jaeger/IEEE/Yao discloses said receiving a request for at least one specific content further comprises:

receiving a request for at least a portion of recorded video (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

9. **As per claim 3**, the combination of Jaeger/IEEE/Yao discloses said receiving a request for at least one specific content further comprises:

receiving a request for at least a portion of recorded audio (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

10. **As per claim 4**, the combination of Jaeger/IEEE/Yao discloses said receiving a request for at least one specific content further comprises:

receiving a request for at least a portion of recorded video and recorded audio (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

11. **As per claim 5**, the combination of Jaeger/IEEE/Yao discloses said receiving a request for at least one specific content further comprises:

receiving a request for at least a portion of at least one of computer processable and network processable data (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)"). *It should be noted that audio, video, and data tracks are all both computer processable data as well as network processable data.*

12. **As per claim 6**, the combination of Jaeger/IEEE/Yao discloses obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content further comprises:

consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions (Yao, col. 7, lines 55-65, Fig. 5, element 26; Fig. 6).

13. **As per claim 12**, the combination of Jaeger/IEEE/Yao discloses said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

associating the specific content with at least one absolute time associated with a clock (Yao, Fig. 6). *It should be noted that "2400 ms" is an absolute time. It should also be noted that it is required the "2400 ms" be associated with a clock.*

14. **As per claim 13**, the combination of Jaeger/IEEE/Yao discloses said associating the specific content with at least one absolute time associated with a clock further comprises:

associating the specific content with at least one time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and/or a number of ticks relative to some specified received data (Yao, Fig. 6). *See the citation note for claim 12 above.*

15. **As per claim 14**, the combination of Jaeger/IEEE/Yao discloses said associating the specific content with at least one absolute time associated with a clock further comprises:

associating the specific content with at least one absolute time associated with a transmitted clock (Yao, Fig. 6). *See the citation note for claim 12 above.*

16. **As per claim 15**, the combination of Jaeger/IEEE/Yao discloses said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

associating the specific content with at least one relative time (Yao, Fig. 6). *It should be noted that "2400 ms" is also a relative time.*

17. **As per claim 16**, the combination of Jaeger/IEEE/Yao discloses said associating the specific content with at least one relative time further comprises:

associating the specific content with at least one time relative to a received marker (Yao, Fig. 6). *It should be noted that the end of a "2400 ms segment" is equivalent to the "received marker."*

18. **As per claim 17**, the combination of Jaeger/IEEE/Yao discloses said associating the specific content with at least one relative time further comprises:

associating the specific content with at least one time of a first and/or second received marker (Yao, Fig. 6). *It should be noted that the beginning of a "2400 ms segment" is equivalent to the "first received marker" and the end of a "2400 ms segment" is equivalent to the "second received marker."*



19. **As per claim 18**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses (Jaeger, col. 6, lines 49-63, Fig. 2). *It should be noted that the re-ordered audio/video/data tracks/signals are recorded tracks from a disk drive and therefore must be cyclically transmitted data.*

20. **As per claim 19**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from a first network and a second network in response to the one or more temporal addresses (Yao, col. 8, lines 65-67, Fig. 6). *It should be noted that "disk-0" is a "first network" and "disk-1" is a "second network." It should also be noted that the "transfer start timings" are equivalent to "temporal addresses."*

21. **As per claim 20**, the combination of Jaeger/IEEE/Yao discloses constructing the specific content from data selected from a first network and a second network in response to the one or more temporal addresses (Yao, col. 8, lines 65-67, col. 9, lines 30-32, Fig. 6).

22. **As per claim 21**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having file-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

23. **As per claim 22**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having disk-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

24. **As per claim 23**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having tape-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

25. **As per claim 24**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having substantially static-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig.

2).

26. **As per claim 25**, the combination of Jaeger/IEEE/Yao discloses said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having object-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

27. **As per claim 26**, Jaeger discloses a system comprising:

means for obtaining one or more temporal addresses corresponding to the at least one specific content (col. 5, lines 52-63; Fig. 1); *See the citation note for the similar limitation in claim 1 above.*

and means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses (col. 6, lines 49-63; Fig. 2). *See the citation note for the similar limitation in claim 1 above.*

Jaeger does not explicitly disclose means for receiving a request for at least one specific content.

IEEE discloses disk read I/O transactions are composed of transaction initiations (i.e. requests) (pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the record/playback apparatus receive a playback request so that the incremental temporal segments of each recorded track are read from the disk in response to the playback request. The motivation for doing so would have been to prevent playback at times when the disk drive and/or RAM buffer are not ready to handle the reading and/or writing of data frames.

The combination of Jaeger/IEEE does not disclose associating the specific content with one or more times of one or more transmitted data portions.

Yao discloses associating the specific content with one or more times of one or more transmitted data portions (col. 7, lines 33-65; Fig. 5, element S26). *It should be noted that the "transfer start timings" are equivalent to the "one or more times".*

The combination of Jaeger/IEEE and Yao are analogous art because they are from the same field of endeavor, that being data streaming systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Yao's schedule within Jaeger/IEEE's recording/playback system. The motivation for doing so would have been to provide a real time stream server and a method for operating a real time stream server, capable of realizing a supply of a plurality of real time stream data with different data rates by a scheduling scheme using constant time-slot interval and transfer start timing period, without wasting a transfer capacity of disk devices (Yao, col. 2, lines 40-46).

28. **As per claim 27**, the combination of Jaeger/IEEE/Yao discloses said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded video (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

29. **As per claim 28**, the combination of Jaeger/IEEE/Yao discloses said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded audio (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

30. **As per claim 29**, the combination of Jaeger/IEEE/Yao discloses said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded video and recorded audio (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

31. **As per claim 30**, the combination of Jaeger/IEEE/Yao discloses said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of at least one of computer processable and network processable data (Jaeger, col. 8, lines 36-46, Fig. 5; IEEE, pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)"). *See the citation note for claim 5 above.*

32. **As per claim 31**, the combination of Jaeger/IEEE/Yao discloses means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content further comprises:

means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions (Yao, col. 7, lines 55-65, Fig. 5, element 26). *See the citation note for claim 6 above.*

33. **As per claim 37**, the combination of Jaeger/IEEE/Yao discloses said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for associating the specific content with at least one absolute time associated with a clock (Yao; Fig. 6). *See the citation note for claim 12 above.*

34. **As per claim 38**, the combination of Jaeger/IEEE/Yao discloses said means for associating the specific content with at least one absolute time associated with a clock further comprises:

means for associating the specific content with at least one time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and/or a number of ticks relative to some specified received data (Yao; Fig. 6). *See the citation note for claim 12 above.*

35. **As per claim 39**, the combination of Jaeger/IEEE/Yao discloses said means for associating the specific content with at least one absolute time associated with a clock further comprises:

means for associating the specific content with at least one absolute time associated with a transmitted clock (Yao; Fig. 6). *See the citation note for claim 12 above.*

36. **As per claim 40**, the combination of Jaeger/IEEE/Yao discloses said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for associating the specific content with at least one relative time (Yao; Fig. 6). *See the citation note for claim 15 above.*

37. **As per claim 41**, the combination of Jaeger/IEEE/Yao discloses said means for associating the specific content with at least one relative time further comprises:

means for associating the specific content with at least one time relative to a received marker (Yao; Fig. 6). *See the citation note for claim 16 above.*

38. **As per claim 42**, the combination of Jaeger/IEEE/Yao discloses said means for associating the specific content with at least one relative time further comprises:

means for associating the specific content with at least one time of a first and/or second received marker (Yao; Fig. 6). *See the citation note for claim 17 above.*

39. **As per claim 43**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses (Jaeger, col. 6, lines 49-63, Fig. 2). *See the citation note for claim 18 above.*

40. **As per claim 44**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from a first network and/or a second network in response to the one or more temporal addresses (Yao, col. 8, lines 65-67, Fig. 6). *See the citation note for claim 19 above.*

41. **As per claim 45**, the combination of Jaeger/IEEE/Yao discloses means for constructing the specific content from data selected from a first network and/or a second network in response to the one or more temporal addresses (Yao, col. 8, lines 65-67, col. 9, lines 30-32, Fig. 6).

42. **As per claim 46**, the combination of Jaeger/IEEE discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having file-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

43. **As per claim 47**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having disk-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

44. **As per claim 48**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having tape-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

45. **As per claim 49**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having substantially static-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).



46. **As per claim 50**, the combination of Jaeger/IEEE/Yao discloses said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having object-address-to-temporal-address translated data (Jaeger, col. 5, lines 12-20, col. 6, lines 49-63, Fig. 2).

47. **Claims 7-11 and 32-36** are rejected under 35 U.S.C. 103(a) as being obvious over Jaeger in view of IEEE and Yao as applied to claims 1, 6, 26, and 31 above, and further in view of Ma et al. (U.S. Patent 5,926,649) (hereinafter "Ma").

48. **As per claim 7**, the combination of Jaeger/IEEE/Yao discloses all the limitations of claim 7 except said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.

Ma discloses the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system (col. 9, lines 10-22; col. 10, lines 43-60; Figs. 4 and 5). *It should be noted that "disk-based storage system 14" is equivalent to the "hardware spatial data storage system". It should also be noted that the schedules in Fig. 5 are defined in response to the location of data in the disk-based storage system. The location of data in the disk-based storage system dictates the order of data in the disk-based storage system*

*Therefore, it follows that the schedules in Fig. 5 are also defined in response to the order of the data in the disk-based storage system.*

The combination of Jaeger/IEEE/Yao and Ma are analogous art because they are from the same field of endeavor, that being data transmission.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply Ma's scheduling technique to Jaeger/IEEE/Yao's schedule. The motivation for doing so would have been to provide sequential-like parallel retrieval suitable for supporting real-time multimedia data distribution for large numbers of clients.

49. **As per claim 8**, the combination of Jaeger/IEEE/Yao/Ma discloses said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

consulting a schedule published by at least one of a source controller and/or a source switch controller (Yao, col. 5, lines 28-29, col. 7, lines 55-65, Fig. 3, element 2, Fig. 5, element 26). *It should be noted that the "control device" is equivalent to the "source controller."*

50. **As per claim 9**, the combination of Jaeger/IEEE/Yao/Ma discloses said consulting a schedule published by at least one of a source controller and/or a source switch controller further comprises:

accepting input of the schedule published by at least one of the source controller and the source switch controller (Yao, col. 7, lines 55-65, Fig. 3, Fig. 5, element 26).

51. **As per claim 10**, the combination of Jaeger/IEEE/Yao/Ma discloses said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

consulting a schedule received from at least one of a source controller and/or a source switch controller (Yao, col. 7, lines 55-65, Fig. 5, element 26).

52. **As per claim 11**, the combination of Jaeger/IEEE/Yao/Ma discloses said consulting a schedule received from at least one of a source controller and/or a source switch controller further comprises:

receiving the schedule from a data stream (Yao, col. 7, lines 55-65, Fig. 3, Fig. 5, element 26).

53. **As per claim 32**, the combination of Jaeger/IEEE/Yao discloses all the limitations of claim 32 except said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.

Ma discloses the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system (col. 9, lines 10-22; col. 10, lines 43-60; Figs. 4 and 5). *See the citation for claim 7 above.*

The combination of Jaeger/IEEE/Yao and Ma are analogous art because they are from the same field of endeavor, that being data transmission.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply Ma's scheduling technique to Jaeger/IEEE/Yao's schedule. The motivation for doing so would have been to provide sequential-like parallel retrieval suitable for supporting real-time multimedia data distribution for large numbers of clients.

54. **As per claim 33**, the combination of Jaeger/IEEE/Yao/Ma discloses said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for consulting a schedule published by at least one of a source controller and/or a source switch controller (Yao, col. 5, lines 28-29, col. 7, lines 55-65, Fig. 3, element 2, Fig. 5, element 26). *See the citation note for claim 8 above.*

55. **As per claim 34**, the combination of Jaeger/IEEE/Yao/Ma discloses said means for consulting a schedule published by at least one of a source controller and/or a source switch controller further comprises:

means for accepting input of the schedule published by at least one of the source controller and the source switch controller (Yao, col. 7, lines 55-65, Fig. 3, Fig. 5, element 26).

56. **As per claim 35**, the combination of Jaeger/IEEE/Yao/Ma discloses said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for consulting a schedule received from at least one of a source controller and/or a source switch controller (Yao, col. 7, lines 55-65, Fig. 5, element 26).

57. **As per claim 36**, the combination of Jaeger/IEEE/Yao/Ma discloses said means for consulting a schedule received from at least one of a source controller and/or a source switch controller further comprises:

means for receiving the schedule from a data stream (Yao, col. 7, lines 55-65, Fig. 3, Fig. 5, element 26).

### **Conclusion**

### **STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by MPEP 707.70(i):

### **CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, **claims 1-50** have received an action on the merits and are subject of a final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arpan P. Savla whose telephone number is (571) 272-1077. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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